

## **STATIONARY SOURCE PERMIT TO OPERATE**

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

Everbrite, LLC  
627 East 30<sup>th</sup> Street  
Buena Vista, Virginia 24416  
Registration No.: 81078  
Plant ID No.: 51-163-0051

is authorized to operate

a sign manufacturing facility

located at

627 East 30<sup>th</sup> Street  
Buena Vista, Virginia

in accordance with the Conditions of this permit.

Approved on

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Deputy Regional Director, Valley Region

Permit consists of 7 pages.  
Permit Conditions 1 to 15.  
Attachment A.

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## **INTRODUCTION**

This permit approval is based on the permit application dated October 13, 2006. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.

Words or terms used in this permit shall have meanings as provided in 9 VAC 5-10-10 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact.

The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information.

## **PROCESS REQUIREMENTS**

1. **Equipment List** - Equipment at this facility consists of the following:

<b>Equipment to be Operated</b>		
<b>Reference No.</b>	<b>Equipment Description</b>	<b>Rated Capacity</b>
SB1	One spray booth with 2.2 MMBtu/hr natural gas-fired burner	7 gal/hr
MP1 & MP2	Two metal paint booths	--
PP1 & PP2	Two plastic paint booths	--
SS	Silk screening operation with five stations	--

Specifications included in the permit under this Condition are for informational purposes only and do not form enforceable terms or conditions of the permit.  
(9 VAC 5-80-850)

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## **OPERATING/EMISSION LIMITATIONS**

2. **Emission Limits: Hazardous Air Pollutants** - Hazardous air pollutant (HAP) emissions, as defined by §112(b) of the Clean Air Act, from the facility shall not exceed 9.50 tons per year of any individual HAP or 24.50 tons per year of any combination of HAPs calculated monthly as the sum of each consecutive 12-month period. HAPs which are not accompanied by a specific CAS number (as listed in Attachment A) shall be calculated as the sum of all compounds containing the named chemical when determining compliance with the individual HAP emissions limitation of 9.50 tons per year.  
(9 VAC 5-80-850)
3. **Emission Controls** – Particulate emissions from the two metal paint booths (Ref # MP1 & MP2), the two plastic paint booths (Ref # PP1 & PP2), and the spray booth (Ref # SB1) shall be controlled by filters with a removal efficiency equal to or greater than 85%. The permittee shall change the filters in accordance with the manufacturer's recommended frequency. The spray booths shall be provided with adequate access for inspection.  
(9 VAC 5-80-850)
4. **Fugitive VOC Emission Controls** – Fugitive emission controls shall include the following, or equivalent, as a minimum: volatile organic compounds shall not be intentionally spilled, discarded to sewers, stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution control practices for minimizing emissions.  
(9 VAC 5-80-850 and 9 VAC 5-50-20)

## **MONITORING**

5. **Filter Monitoring** - The permittee shall perform inspections of the two metal paint booths (Ref # MP1 & MP2), the two plastic paint booths (Ref # PP1 & PP2), and the spray booth (Ref # SB1) each day of booth operation. The inspections shall include a check of correct filter placement and filter condition.  
(9 VAC 5-80-850)

## **RECORDS AND REPORTING**

6. **On Site Records** - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Regional Office. These records shall include, but are not limited to:
  - a. DEQ approved documentation demonstrating the removal efficiency of the filters utilized to control particulate emissions from the two metal paint booths (Ref # MP1& MP2), the two plastic paint booths (Ref # PP1& PP2), and the spray booth (Ref # SB1).

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- b. Log showing dates of filter replacement for each paint booth (Ref # MP1, MP2, PP1, PP2, and SB1).
- c. Monthly and annual throughput (in gallons, pounds, or tons) of each HAP-containing material used at the facility. This includes, but is not limited to, materials used in all manufacturing processes, fuel burning equipment and miscellaneous sources such as insignificant emission units and maintenance, repair, and construction activities (coatings, adhesives, lubricants, etc.). Annual throughputs shall be calculated monthly as the sum of each consecutive 12-month period.
- d. Monthly and annual individual and total HAP emissions (in tons) to verify compliance with the individual and total HAP emission limitations in Condition 2. This includes, but is not limited to, materials used in all manufacturing processes, fuel burning equipment and miscellaneous sources such as insignificant emission units and maintenance, repair, and construction activities (coatings, adhesives, lubricants, etc.). Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.
- e. Material Safety Data Sheets (MSDS) or other vendor information showing HAP content for each material used at the facility.
- f. Inspection records as required by Condition 5.

These records shall be available for inspection by the DEQ and shall be current for at least the most recent five years.

(9 VAC 5-80-900 and 9 VAC 5-50-50)

7. **HAP Emissions Calculations** - The permittee shall determine compliance with the HAP emission limits in Condition 2 as follows:

- a. To calculate non-particulate HAP emissions from the facility on a monthly or annual basis:

$$E_t = \sum_{i=1}^n C_i T_i$$

..... Equation 1

Where:

$E_t$  = emission rate of non-particulate HAP (t) (lb/time period) from the facility

$C_i$  = content of HAP (t) in each HAP-containing material used at the facility (i) during the time period (lb/gal)

$T_i$  = number of gallons of each HAP-containing material used at the facility

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(i) during the time period (gal)

n = total number of HAP-containing materials used at the facility

Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.

b. To calculate particulate HAP emissions from the facility on a monthly or annual basis:

$$E_t = \left( \sum_{i=1}^n P_i G_i D_i \right) \left( \frac{100 - T}{100} \right) \left( \frac{100 - CE}{100} \right)$$

..... Equation 2

Where:

$E_t$  = emission rate for particulate HAP (t) (lb/time period) from the facility

$P_i$  = particulate HAP content of each HAP-containing material used at the facility (i) during the time period (lb solids/lb paint)

$G_i$  = number of gallons of each HAP-containing material used at the facility (i) during the time period (gal)

$D_i$  = density of each HAP-containing material used at the facility (i) during the time period (lb/gal)

$T$  = transfer efficiency of the spray booth (%) if appropriate  
 = 50 [unless records demonstrate a different value is appropriate]

$CE$  = control efficiency of the filter (%) if appropriate  
 = 85 [unless records demonstrate a different value is appropriate]

n = total number of HAP-containing materials used at the facility

Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.

(9 VAC 5-80-850)

8. **Semi-Annual Reports** – The permittee shall submit semi-annual reports containing the following information to determine compliance with the individual and total HAP emission limits established in Condition 2 to the Director, Valley Regional Office, within 30 days after the end of the semi-annual period. The report must be signed by a responsible official,

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consistent with 9 VAC 5-80-830 B, and shall include, at a minimum:

- a. Monthly and annual throughput of each HAP-containing material used at the facility during the semi-annual reporting period.
- b. Monthly and annual individual and total HAP emissions from the facility during the semi-annual reporting period.

(9 VAC 5-80-900 and 9 VAC 5-50-50)

### **GENERAL CONDITIONS**

9. **Right of Entry** - The permittee shall allow authorized local, state, and federal representatives, upon the presentation of credentials:
  - a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;
  - b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;
  - c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and
  - d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.

(9 VAC 5-170-130 and 9 VAC 5-80-850)

10. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Director, Valley Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone, or telegraph. Such notification shall be made as soon as practicable but no later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within two weeks of discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Valley Regional Office in writing.  
(9 VAC 5-20-180 C and 9 VAC 5-80-850)

11. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating

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any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.  
(9 VAC 5-20-180 I and 9 VAC 5-80-850)

12. **Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.  
(9 VAC 5-50-20 E and 9 VAC 5-80-850)

13. **Permit Suspension/Revocation** - This permit may be revoked if the permittee:

- a. Knowingly makes material misstatements in the permit application or any amendments to it;
- b. Fails to comply with the terms or conditions of this permit;
- c. Fails to comply with any emission standards applicable to a permitted emissions unit;
- d. Causes emissions from this facility which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard;
- e. Fails to operate this facility in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect at the time that an application for this permit is submitted; or
- f. Fails to comply with the applicable provisions of Articles 6, 8 and 9 of 9 VAC 5 Chapter 80.

(9 VAC 5-80-1010)

14. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Valley Regional Office of the change of ownership within 30 days of the transfer.  
(9 VAC 5-80-940)

15. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.  
(9 VAC 5-80-860 D)





## ATTACHMENT A

Note 1: Emissions for pollutant listings which do not have a specific CAS number must be totaled when determining major source applicability under Title V and for HAP regulations (i.e. 112(g) & (d)).

<u>CAS#</u>	<u>NAME</u>
see Note 1	1,2,3,4,5,6-HEXACHLOROCYCLOHEXANE
see Note 1	(ALL STEREO ISOMERS INCLUDING LINDANE)
see Note 1	ANTIMONY COMPOUNDS(1)
see Note 1	ARSENIC COMPOUNDS
see Note 1	BERYLLIUM COMPOUNDS
see Note 1	CADMIUM COMPOUNDS
see Note 1	CHROMIUM COMPOUNDS
see Note 1	COBALT COMPOUNDS
see Note 1	COKE OVEN EMISSIONS
see Note 1	CYANIDE COMPOUNDS(2)
see Note 1	GLYCOL ETHERS(3)
see Note 1	LEAD COMPOUNDS
see Note 1	MANGANESE COMPOUNDS
see Note 1	MERCURY COMPOUNDS
see Note 1	NICKEL COMPOUNDS
see Note 1	POLYCYCLIC ORGANIC MATTER/POM(4)
see Note 1	SELENIUM COMPOUNDS

<u>CAS#</u>	<u>NAME</u>
9 4 0	o-ANISIDINE
50 0 0	FORMALDEHYDE
51 28 5	2,4-DINITROPHENOL
51 79 6	ETHYL CARBAMATE/URETHANE
53 96 3	2-ACETYLAMINOFLUORENE
56 23 5	CARBON TETRACHLORIDE
56 38 2	PARATHION
57 14 7	1,1-DIMETHYLHYDRAZINE
57 57 8	B-PROPIOLACTONE
57 74 9	CHLORDANE
59 89 2	N-NITROSOMORPHOLINE/NMOR
60 11 7	DIMETHYL AMINOAZOBENZENE/4-DIMETHYLAMINOAZOBENZENE
60 34 4	METHYL HYDRAZINE
60 35 5	ACETAMIDE
62 53 3	ANILINE & HOMOLOGUES
62 73 7	DICHLORVOS
62 75 9	N-NITROSODIMETHYLAMINE/NDMA
63 25 2	CARBARYL
64 67 5	DIETHYL SULFATE
67 56 1	METHANOL
67 66 3	CHLOROFORM
67 72 1	HEXACHLOROETHANE

68	12	2	DIMETHYLFORMAMIDE/N,N-DIMETHYLFORMAMIDE
71	43	2	BENZENE (including benzene from gasoline)
71	55	6	METHYL CHLOROFORM/1,1,1-TRICHLOROETHANE
72	43	5	METHOXYCHLOR
72	55	9	2,2-BIS(P-CHLORPHENYL)-1,1-DICHLOROETHYLENE/DDE
74	83	9	METHYL BROMIDE/BROMOMETHANE
74	87	3	METHYL CHLORIDE/CHLOROMETHANE
74	88	4	METHYL IODIDE/IODOMETHANE
75	0	3	ETHYL CHLORIDE/CHLOROETHANE
75	1	4	VINYL CHLORIDE/CHLOROETHYLENE
75	5	8	ACETONITRILE
75	7	0	ACETALDEHYDE
75	9	2	METHYLENE CHLORIDE/DICHLOROMETHANE
75	15	0	CARBON DISULFIDE
75	21	8	ETHYLENE OXIDE
75	25	2	BROMOFORM
75	34	3	1,1-DICHLOROETHANE/ETHYLIDENE DICHLORIDE
75	35	4	VINYLDENE CHLORIDE/1,1-DICHLOROETHYLENE
75	44	5	PHOSGENE/CARBONYLCHLORIDE
75	55	8	1,2-PROPYLENE IMINE
75	56	9	PROPYLENE OXIDE/1,2-EPOXYPROPANE
76	44	8	HEPTACHLOR
77	47	4	HEXACHLOROCYCLOPENTADIENE
77	78	1	DIMETHYL SULFATE
78	59	1	ISOPHORONE
78	87	5	PROPYLENE DICHLORIDE/1,2-DICHLOROPROPANE
78	93	3	METHYL ETHYL KETONE/2-BUTANONE
79	0	5	1,1,2-TRICHLOROETHANE
79	1	6	TRICHLOROETHYLENE
79	6	1	ACRYLAMIDE
79	10	7	ACRYLIC ACID
79	11	8	CHLORACETIC ACID
79	34	5	1,1,2,2-TETRACHLOROETHANE
79	44	7	DIMETHYL CARBAMOYL CHLORIDE
79	46	9	2-NITROPROPANE
80	62	6	METHYL METHACRYLATE
82	68	8	PENTACHLORONITROBENZENE/QUINTOBENZENE
84	74	2	DIBUTYL PHTHALATE
85	44	9	PHTHALIC ANHYDRIDE
87	68	3	HEXACHLOROBUTADIENE
87	86	5	PENTACHLOROPHENOL
88	6	2	2,4,6-TRICHLOROPHENYL
91	20	3	NAPHTHALENE
91	22	5	QUINOLINE
91	94	1	3,3'-DICHLOROBENZIDENE
92	52	4	BIPHENYL
92	67	1	4-AMINODIPHENYL

92	87	5	BENZIDINE
92	93	3	4-NITRODIPHENYL
94	75	7	2,4-D, (DICHLOROPHENOXY/ACETIC ACID) (INCLUDING SALTS AND ESTERS)
95	95	4	2,4,5-TRICHLOROPHENOL
95	47	6	O-XYLENE
95	48	7	O-CRESOL
95	53	4	O-TOLUIDINE
95	80	7	2,4-TOLUENE DIAMINE/TOLUENE-2,4-DIAMINE
96	9	3	STYRENE OXIDE
96	12	8	1,2-DIBROMO-3-CHLOROPROPANE
96	45	7	ETHYLENE THIOUREA/ETU
98	7	7	BENZOTRICHLORIDE
98	82	8	CUMENE
98	86	2	ACETOPHENONE
98	95	3	NITROBENZENE
100	2	7	4-NITROPHENOL
100	41	4	ETHYL BENZENE
100	42	5	STYRENE, MONOMER/VINYL BENZENE
100	44	7	BENZYL CHLORIDE
101	14	4	4,4-METHYLENE BIS(2-CHLOROANILINE)
101	68	8	4,4'-METHYLENEDIPHENYL DIISOCYANATE/MDI
101	77	9	4,4-METHYLENE DIANILINE
106	42	3	P-XYLENE
106	44	5	P-CRESOL
106	46	7	1,P-DICHLOROBENZENE
106	50	3	P-PHENYLENEDIAMINE
106	51	4	QUINONE
106	88	7	1,2-EPOXYBUTANE
106	89	8	EPICHLOROHYDRIN
106	93	4	ETHYLENE DIBROMIDE/EDB/1,2-DIBROMOETHANE
106	99	0	1,3-BUTADIENE
107	2	8	ACROLEIN
107	5	1	ALLYL CHLORIDE
107	6	2	1,2-DICHLOROETHANE/ETHYLENE DICHLORIDE
107	13	1	ACRYLONITRILE
107	21	1	ETHYLENE GLYCOL
107	30	2	CHLOROMETHYL METHYL ETHER/CMME
108	90	7	CHLOROBENZENE
108	5	4	VINYL ACETATE
108	10	1	METHYL ISOBUTYL KETONE/HEXONE
108	31	6	MALEIC ANHYDRIDE
108	38	3	M-XYLENE
108	39	4	M-CRESOL
108	88	3	TOLUENE
108	95	2	PHENOL
110	54	3	HEXANE
111	42	2	DIETHANOLAMINE

111	44	4	DICHLOROETHYL ETHER/BIS(2-CHLOROETHYL)ETHER)
114	26	1	PROPOXUR/BAYGON
117	81	7	DI-SEC-OCTYL PHTHALATE/BIS(2-ETHYLHEXYL)PHTHALATE
118	74	1	HEXACHLOROBENZENE
119	90	4	3,3-DIMETHOXYBENZIDINE
119	93	7	3,3-DIMETHYLBENZIDINE
120	80	9	CATECHOL
120	82	1	1,2,4-TRICHLOROBENZENE
121	14	2	2,4-DINITROTOLUENE
121	44	8	TRIETHYLAMINE
121	69	7	DIMETHYLANILINE
122	66	7	1,2-DIPHENYLHYDRAZINE
123	31	9	HYDROQUINONE/DIHYDROXYBENZENE
123	38	6	PROPIONALDEHYDE
123	91	1	1,4-DIOXANE/1,4-DIETHYLENEOXIDE
126	99	8	2-CHLORO-1,3-BUTADIENE/BETA-CHLOROPRENE
127	18	4	TETRACHLOROETHYLENE/PERCHLOROETHYLENE
131	11	3	DIMETHYLPHTHALATE
132	64	9	DIBENZOFURANS
133	6	2	CAPTAN
133	90	4	CHLORAMBEN
140	88	5	ETHYL ACRYLATE
151	56	4	ETHYLENIMINE
156	62	7	CALCIUM CYANAMIDE
302	1	2	HYDRAZINE
334	88	3	DIAZOMETHANE
463	58	1	CARBONYL SULFIDE
510	15	6	CHLOROBENZILATE
532	27	4	2-CHLOROACETOPHENONE
534	52	1	4,6-DINITRO-O-CRESOL (including salts)
540	84	1	2,2,4-TRIMETHYLPENTANE
542	7	6	1,3-DICHLOROPROPENE
542	88	1	BIS-(CHLOROMETHYL) ETHER
584	84	9	TOLUENE-2,4-DIISOCYANATE/TDI
593	60	2	VINYL BROMIDE
624	83	9	METHYL ISOCYANATE
680	31	9	HEXAMETHYL PHOSPHORAMIDE/HMPA
684	93	5	N-NITROSO-N-METHYLUREA/NMU
822	6	0	HEXAMETHYLENE DIISOCYANATE
1120	71	4	1,3-PROPANE SULTONE
1319	77	3	CRESOLS/CRESYLIC ACID
1330	20	7	XYLENE ISOMERS AND MIXTURES
1336	36	3	POLYCHLORINATED BIPHENYLS/AROCHLORS
1582	9	8	TRIFLURALIN
1634	4	4	METHYL TERT BUTYL ETHER
1746	1	6	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN
7550	45	0	TITANIUM TETRACHLORIDE

7647	1	0	HYDROGEN CHLORIDE/HYDROCHLORIC ACID (GAS ONLY)
7664	39	3	HYDROGEN FLUORIDE/HYDROFLUORIC ACID
7723	14	0	PHOSPHOROUS
7782	50	5	CHLORINE
7803	51	2	PHOSPHINE
8001	35	2	TOXAPHENE/CHLORINATED CAMPHENE

The following pollutants and pollutant source categories are listed as HAPs under section 112(b) but are not on the Commonwealth of Virginia's Priority Pollutant list:

1. Asbestos NESHAP, 40 CFR 61 Subpart M (for asbestos removal, demolition and installation contact Virginia Department of Labor - 804/786-8009).
2. Fine Mineral Fibers.
3. Radionuclides (including radon).

(1) For all listing above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical as part of that chemical's infrastructure.

(2) X'CN where X=H' or any other group where a formal dissociation may occur. For example, KCN or Ca(CN)<sub>2</sub>

(3) R-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OR'

where: n = 1, 2, or 3  
R = alkyl C7 or less  
or R = phenyl or alkyl substituted phenyl  
R' = H, or alkyl C7 or less  
or ester, sulfate, phosphate,  
nitrate, or sulfonate

(4) Includes substituted and/or unsubstituted polycyclic aromatic hydrocarbons and aromatic heterocycle compounds, with two or more fused rings, at least one of which is benzenoid in structure. Polycyclic Organic Matter is a mixture of organic compounds containing one or more of these polycyclic aromatic chemicals which include dioxins and furans. Polycyclic Organic Matter is generally formed or emitted during thermal processes including (1) incomplete combustion, (2) pyrolysis, (3) the volatilization, distillation or processing of fossil fuels or bitumens, or (4) the distillation or thermal processing of non-fossil fuels.